

# JAPANESE SAWFLIES IN THE COLLECTION OF THE UNITED STATES NATIONAL MUSEUM.

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In connection with work on Nearctic Tenthredinoidea it has been deemed advisable to study the faunæ of the world, and more especially that of the Palæarctic region, to obtain a more perfect knowledge of the genera and to become better acquainted with the work of other writers on these insects. In these days of fast steamship connection between the different countries the possibility of introducing foreign insects into this country is much greater than in former times. A conspicuous example of this has already been observed—when *Nesodiprion* (olim *Lophyrus*) *japonicus* (Marlatt) came to the port of San Francisco on a Japanese pine in 1902.

The following paper is a partial result of the study of the collection of sawflies from Japan in the United States National Museum. The material has been presented by Mr. T. Tukai, Mr. A. Koebele, and Doctor Matsumura, and part is thought to belong to a collection sent by Dr. K. Mitsukuri.

The list of species which follows is believed to be complete. All synonyms are omitted. When the species is unknown in nature, the the generic position given is usually that assigned by Konow.

## Family XYELIDÆ.

### *XYELA JAPONICA*, new species.

Differs from the European *Xyela julii* (Brébisson) as determined by Konow as follows: The clypeus has a small rounded tubercle in the middle and is more coarsely sculptured; antennal furrows are wanting near the ocelli and on the front; the postocellar line is less than the ocelloccipital line; the head is darker, and the mesonotum coriaceous.

*Female*.—Length of body, 3 mm.; length of ovipositor, 1.25 mm.; length of anterior wing, 3.5 mm. Head as wide as the length of the second and third antennal joints, occiput convex; antennal furrows wanting; postocellar area not defined; the postocellar line shorter

than the ocelloccipital line; head and mesonotum coriaceous; stigma a little more than twice as long as wide; venation much the same as *julii*; sheath obliquely truncate from top to venter. Black; legs entirely reddish-brown; antennæ and tegulæ piceous; wings hyaline, vitreous; venation, including stigma, pallid translucent.

*Type-locality*.—Hakone, Japan. One female collected by Mr. A. Koebele.

*Type*.—Cat. No. 7303, U.S.N.M.

**XYELA VARIEGATA, new species.**

May be known from *Xyela julii* (Brébisson), as determined by Konow, in the slender spines on the four posterior tibiæ, the absence of the postocellar furrow, the sheath not narrowing below, and the paler color.

*Female*.—Length, 3 mm.; length of ovipositor, 1.25 mm.; length of anterior wing, 3.75 mm. Clypeus longer in the middle and slightly lobed, no carina or tubercle; head about the same width as the length of the second and third antennal joints; occiput convex; antennal furrows wanting; middle fovea faintly indicated; anterior ocellus in a faint depression; postocellar line longer than the ocelloccipital line; head and mesonotum shining and not sculptured when magnified 35×; scutellum granular; stigma broadest near the middle and hardly twice as long as wide; venation similar to *julii*; sheath straight below, gently rounded to the apex above. Black and pale yellow; head, except the postocellar area and two lateral spots on vertex, yellowish; thorax piceous with spots on lateral lobes, pleuræ and pectus pale yellow; abdomen, except above, yellowish; legs, antennæ, and sheath pale yellow; wings hyaline, vitreous; venation, including stigma, pallid-translucent.

The paratypes are slightly smaller and in some the pale markings are reddish-yellow.

*Type-locality*.—Hakone, Japan. Four females collected by Mr. A. Koebele.

*Type*.—Cat. No. 7304, U.S.N.M.

The shape of the sheath, greater length of the postocellar line, shining head, and mesopleuræ will separate this from *Xyela japonica*.

Family PAMPHILIIDÆ [olim Lydidæ].

**CEPHALEIA (CEPHALEIA) NIGROCÆRULEA, new species.**

Blue-black; scape, a triangular spot between antennæ and legs pale yellow; below supraorbital line punctured.

*Female*.—Length 11 mm. Head below supraorbital line, except impunctate areas between antennæ and orbits, covered with large sometimes confluent punctures; behind the supraorbital line shining, and with a few scattered punctures; antennal furrows wanting; postocellar furrow wanting; postocellar area narrowing towards the occi-

put, and on the supraorbital line wider than the length of the postocellar line; third antennal joint about as long as the three following ones united; mesonotum with fine close punctures except along the sutures and apex of scutellum where the punctures are much larger; abdomen finely, transversely, lineolate, reticulate; last ventral plates granular. Blue-black; scape, mandibles, triangular spot from apex of clypeus to between antennæ, tegulæ, and legs below coxæ pale yellow. Wings dusky hyaline; venation black.

*Type-locality*.—Japan. One female with the following figures on the label: 28, 5, 9, 29.

*Type*.—Cat. No. 13314, U.S.N.M.

CEPHALEIA (CEPHALEIA) KOEBELEI, new species.

Will come in the group which the Nearctic *Cephaleia fascipennis* (Cresson) belongs, but differs from that species by the emarginate seventh ventral segment, smaller size, and black abdomen.

*Male*.—Length about 10 mm. Lateral supraclypeal areas polished, impunctate; head below the ocelli granular; clypeus and head behind the ocelli with separate distinct punctures; postgenal area with a carina posteriorly; first joint of the flagel slightly longer than the second and third combined; anterior lobe of the mesonotum shining, impunctate; lateral lobes of the mesonotum with distinct, separate punctures; seventh ventral segment broadly, semicircularly emarginate; hypopygidium narrowed apically and at the apex depressed. Black; clypeus and lateral supraclypeal area pale yellow; antennæ, legs, except a black spot at base above of four anterior femora and all the coxæ, apical margins of all the ventral segments reddish-yellow. Wings hyaline, behind the middle of the stigma dusky and with a faint tendency to a band below the stigma; venation brown.

*Type-locality*.—Japan. One male collected by Mr. A. Koebele.

*Type*.—Cat. No. 13313, U.S.N.M.

PAMPILIUS (ANOPLYLYDA) LUCIDUS, new species.

A distinct species, easily recognized by the concolorous, black abdomen, shining appearance, vitreous wings, and absence of distinct sculpturing.

*Female*.—Length 10.5 mm. Frontal carina, distinct but not sharp, extending to apex of clypeus; entire insect shining and impunctate; antennal furrows extending to occiput, very slightly interrupted near the ocelli; postocellar furrow present; postocellar area nearly quadrate, a very little wider at the occiput; pedicel nearly as long as the fourth joint, third joint not quite as long as fourth plus fifth; inner tooth of claw slightly shorter than outer; stigma broadest where the transverse radius leaves it; last ventral segments finely closely granular. Black; anterior margin of clypeus (broader in the middle), large quadrate spots on upper inner orbits, quadrate spot above the

antennæ, curved line from superior orbits to occiput, tegulæ, scutellum and legs below middle of femora sulphur-yellow. Wings hyaline, vitreous; venation black.

*Type-locality*.—Japan. One female bearing the following numbers: 28, 912, 424, 28.

*Type*.—Cat. No. 13315, U.S.N.M.

### Family SIRICIDÆ.

#### SIREX MATSUMURÆ, new species.

Separated at once from other species of *Sirex* by second cubital cell receiving both recurrent veins. Otherwise related to *gigas* Linnæus, *flavicornis* Fabricius, and *japonicus* F. Smith, but differs from all of these.

*Female*.—Length to apex of abdominal appendage 4 to 40 mm.; length of ovipositor 21 mm. Head entirely coarsely granulatopunctate; clypeus with a narrow median notch; lateral ocelli distinctly below the supraorbital line; the postocellar line slightly longer than the ocellorbital line; antennæ 20 jointed, the apical joints somewhat angular; pronotum large, well developed laterally, smooth, with separated, small tubercles over the surface; mesonotum and scutellum with close usually distinct punctures; the second cubital cell long, receiving both recurrent veins; cross-vein in the anal cell distantly basad of the transverse median; caudal appendage long, smooth, the apical lateral margins with sharp teeth; ovipositor about as long as the abdomen. Black; head except a spot between the orbits and apex of mandibles, basal part of the antennæ, pronotum, legs below femora (posterior legs wanting), and abdomen except the apical margins of the segments, ovipositor and appendage yellow; wings yellowish hyaline, costa and stigma yellowish, venation dark brown; hair of head and thorax mostly black.

*Type-locality*.—Sapporo, Japan. One female collected by Mr. Matsumura. No. 42. There is also a label which bears some Japanese characters on the pin.

*Type*.—Cat. No. 13316, U.S.N.M.

Named for the Japanese entomologist, Doctor Matsumura, who collected the specimen.

### Family ARGIDÆ [olim Hylotomidæ].

#### ARGE NIPPONENSIS, new species.

Differs from the description of *Arge semicærulea* (Kirby) in entirely pale hind femora, a character which will also separate it from *A. pagana* (Panzer).

*Female*.—Length 8 mm. Clypeus and labrum gently arcuately emarginate; median carina strong, sharp; middle fovea narrow elongate, extending from level of antennæ to anterior ocellus, pointed below, with a pit below the middle, and nearly parallel-sided above

the pit; antennal furrows nearly continuous; postocellar furrow wanting; postocellar line subequal with the ocellorbital line; stigma broadest at base, tapering; sheath more sharply pointed than the sides of the ninth segment; cerci robust. Metallic blue; antennæ and four anterior legs black; abdomen and posterior legs beyond the trochanters, except the brownish apex of tibiæ and their tarsi, reddish-yellow. Wings brown, paler beyond the stigma, a dark cloud below the stigma; venation black.

*Type-locality*.—Osakura, Japan. Three females and one male from Dr. K. Mitsukuri.

*Type*.—Cat. No. 13317, U.S.N.M.

The male agrees with the female in color; the head is wanting. The hypopygium is broadly rounded.

### Family DIPRIONIDÆ [olim Lophyridæ].

#### Genus DIPRION Schrank.

=*Lophyrus* LATREILLE (not POLI).

The generic name *Lophyrus* was used by Poli in Mollusca in 1791. *Diprion* Schrank was described the same year as *Lophyrus* Latreille (1802), but with 93 pages priority so should be used in place of *Lophyrus* Latreille (not Poli).

*Type*.—*Tenthredo pini* Linnæus.

#### DIPRION NIPPONICA, new species.

Differs from *D. variegata* (Hartig),<sup>a</sup> its nearest ally, in its larger size, distinct postocellar furrow, not impressed and more coarsely punctured postocellar area, coarsely punctured clypeus, the deeply arcuate false clypeal margin, and black legs.

*Female*.—Length 8.5 mm. Clypeus subdepressed apically, the apical part punctured, similar to the upper, anterior margin arcuately emarginate, the false margin more deeply emarginate; antennæ 20 jointed, the third joint much longer than the fourth, of the type of *pini*; antennal foveæ well defined, not very large; middle fovea rather distinct, nearly circular in outline; ocelli in a curved line, anterior one not in a basin; postocellar area not sharply defined laterally, not impressed, punctured like the rest of vertex and front; postocellar furrow sharply defined, but little longer than the postocellar line; postocellar line shorter than the ocellorbital line, and hardly one-fourth longer than the ocelloccipital line; dorsulum coarsely punctured, with rather large punctures; metanotum punctured all over; inner calcarium of posterior tibiæ simple; claws with an erect median tooth; basal plate with poorly defined punctures; venter with distinct punctures; last ventral plate produced in the

<sup>a</sup> *D. variegata* Hartig is said to be a synonym of *D. frutetorum* (Fabricius), but the two are easily separated by color, and until more evidence has been obtained they should be kept separate.

middle; sheath concealed; cerci small, not very hairy. Black; pronotum, upper part of mesopleuræ, margins of lobes of mesonotum, scutellum, sides of metanotum, basal three and apical four dorsal segments yellow. Legs black; four anterior tibiæ and tarsi yellow. Wings yellowish hyaline; venation testaceous base of stigma darker.

*Type-locality*.—Japan. A female with a label bearing Japanese characters and the number "28."

*Type*.—Cat. No. 13318, U.S.N.M.

#### NESODIPRION, new genus.

*Type of genus*—*Lophyrus japonica* Marlatt.

Differs from *Diprion* Schrank (olim *Lophyrus* Latreille) in the malar space being nearly wanting; the maxillary palpi five-jointed, the labial palpi three-jointed; the longer spur of the hind tibiæ equal, or nearly, in length to the basitarsis; and the biramose antennæ of the female. The rami are not as long as in the male. Sexes as far as known similar. Larvæ feeding on coniferous trees.

#### TABLE TO THE SPECIES OF NESODIPRION.

Species mostly black.

Femora entirely black; basal dorsal segment not punctured. Japan.

*japonica* (Marlatt).

Femora at the apex pale; "segmento primo dorsali medio sparsim punctato."

Hongkong, China ..... *biremis* (Konow).

#### NESODIPRION JAPONICA (Marlatt).

This species was originally described from Japan. It has been introduced into United States through San Francisco, California—teste a male and female bred from a pine received from Japan, April 30, 1902, by Mr. Alex. Craw, San Francisco, California, now in the collection of the U. S. National Museum.

#### NESODIPRION BIREMIS (Konow).

Konow's species may only be a race, but the above differences were noted by comparing *japonica* with the original description of *biremis*.

#### Family CIMBICIDÆ.

#### AGENOCIMBEX, new genus.

*Type of genus*—*Cimbex maculata* Marlatt.<sup>a</sup> (Japan.)

Rather large robust species with the habitus very like *Cimbex*; labrum small, triangular in outline, similar to *Cimbex*; supraclypeal suture wanting; malar space large; eyes converging to the clypeus; posterior orbits not extending beyond the eyes; ocelli in a triangle,

<sup>a</sup>F. W. Konow (1906) has suggested that *Cimbex maculata* Marlatt (1898) is a synonym of *Cimbex jucunda* Mocsary (1896); and the description of Mocsary's species and his figure agree very well with the type of Marlatt's species, but in view of the fact that there is no positive evidence the name *maculata* is still retained.

the lateral ones below the supraorbital line; antennæ clavate, with five joints before the gradually formed club, the third much the longest, club with two distinct joints and a very indistinctly defined one; maxillary palpi six-jointed, labial palpi four-jointed; first perapteron smaller than in *Cimbex*; femora robust without spines; coxæ contiguous; tarsal claws cleft; basal plate deeply, arcuately emarginate posteriorly; wings similar to *Cimbex* except the cross-vein in the anal cell is much nearer the base of the wing.

Belongs to Cimbicinæ and is related to *Cimbex olivier*, but may be easily distinguished from that genus by the contiguous coxæ, and the posterior orbits not extending beyond the eyes.

ABIA RELATIVA, new species.

Related to *Abia japonica* Cameron, but differs from the description of that species in not having a pad-like elevation on the vertex, and only the tarsi are white.

*Female*.—Length 15 mm. Labrum concealed; clypeus broadly arcuately emarginate; frons large, the ridges forming a large basin which incloses the anterior ocellus; a distinct furrow from the anterior ocellus to the occiput; third antennal joint long and slender, nearly as long as the following joints; head sparsely punctured; thorax with distinct, separate punctures; inner claw tooth as long as outer; transverse radius basad of middle of the third cubital cell; first transverse cubitus wanting; abdomen normal. Head, legs and most of the abdomen dull black; thorax and basal segment of abdomen dark green; antennæ entirely black; head, legs, pectus, and anterior part of the scutellum with black hair; mesonotum and pleuræ with fulvous hair; all the tarsi yellowish-white. Wings yellowish-hyaline, apical margin, a small spot around stigma and the first discoidal cell distinctly dusky; venation basally yellowish, apically brown; stigma at base brown, at apex yellowish.

*Male*.—Length about 11 mm. Differs from the female in the usual sexual characters, and in the hair being almost entirely black, that of the mesonotum having a faint fulvous tinge; the apex of the club beneath is reddish. Hypopygidium is truncate at the apex.

*Type-locality*.—Japan. One female collected by Mr. Koebele.

*Type*.—Cat. No. 13319, U.S.N.M.

Family TENTHREDINIDÆ.

PACHYNEMATUS ALNI, new species.

Runs in Konow's revision of the Palæartic Pachynemati<sup>a</sup> to the German species *ravidus* Konow, but does not seem very close to that species. The entirely black pronotum will distinguish it at once.

*Male*.—Length 6 mm. Anterior margin of the clypeus deeply, rather narrowly emarginate, the lobes broad and obtusely rounded

<sup>a</sup>Zeit. Hym. Dipt., vol. 3, 1903.

at the apex; head somewhat broader behind the eyes; ocellar basin poorly defined, the lateral walls subparallel; an elongate fovea in front of the anterior ocellus; middle fovea not sharply defined, spreading over the antennæ; frontal crest unbroken; postocellar furrow drawn down by the furrow from the anterior ocellus; antennæ not quite as long as the insect, the third and fourth joints equal; thorax shining, almost impunctate; suture in front of the scutellum deep and well defined, sharply angled; stigma hardly twice as long as wide at the base, tapering to the apex; sides of the third cubital cell parallel; hypopygidium of the short type, rounded at the apex. Black; antennæ beneath rufoferruginous; tegulæ pale brown; legs below the trochanters except the darkened apices of hind tibiæ and tarsi ferruginous. Wings hyaline, iridescent; venation black, stigma brownish-yellow.

The posterior tibiæ are sometimes pallid, and there is sometimes a pale brown spot at the apex of the hypopygidium.

*Type-locality*.—Konosu, Saitama, Japan. Four males collected April 18, 1909, on foliage of *Alnus* by Mr. T. Fukai.

*Type*.—Cat. No. 13320, U.S.N.M.

PRISTIPHORA INSULARIS, new species.

Related to *P. alnivora* Hartig, but differs in a number of ways from that species.

*Female*.—Length 5.5 mm. Head rather closely granular all over; antennal foveæ small; antennal furrows wanting; middle fovea rather poorly defined, elongate; ocellar basin wanting; postocellar area poorly defined laterally, about four times as wide as the cephal-caudad width; postocellar furrow well defined; postocellar line longer than the ocellorbital line; third antennal joint slightly longer than the fourth; dorsulum shining with poorly defined, scattered punctures; stigma robust, widest at the base; third cubital cell but little wider at apex; upper discal cell exceeding the lower on the outer margin; sheath robust, obtusely pointed, the lower margin emarginate; saw with rather small, regular, obtusely pointed teeth. Black; labrum, mandibles (apices piceous), angles of pronotum, tegulæ, legs below middle of coxæ, except the apices of femora tibiæ and tarsi which are dusky, *yellowish*; wings hyaline, iridescent; venation brown.

*Type-locality*.—Japan. One female. Collector unknown.

*Type*.—Cat. No. 13321, U.S.N.M.

NESOTOMOSTETHUS, new genus.

*Type of genus*.—*Blennocampa religiosa* Marlatt.

Robust species. Malar space very narrow, almost wanting; clypeus nearly truncate; posterior orbits broad; lateral ocelli on the supra-orbital line; antennæ not hairy, of the normal *Blennocampine* type,



pedicellum subequal in length with the scape, longer than wide, third joint longer than fourth; mesopleuræ without a præpleuræ; mesosternum with a distinct præsternum; scutellum of the metathorax well defined; venation normal; transverse radius and third transverse cubitus at different angles, third cubital cell large, transverse median in about the middle of the cell, hind wings with a closed discal cell, anal cell longly petiolate; hind basitarsis much shorter than the following joints; tarsal claws cleft, and with a basal tooth; last ventral segment in the middle produced; sheath of the normal type; hypopygidium normal.

This genus can be recognized by the tarsal claws, the short basitarsis, the normal antennæ, the absence of the præpleuræ on the mesopleuræ, and the presence of a meso-præsternum.

Marlatt's description of the tarsal claws should be corrected. The male has the head mostly black.

MONOPHADNOIDES CRASSICORNIS, new species.

Black; wings strongly dusky; antennæ thickened in the middle.

*Male*.—Length 6.5 mm. Clypeus truncate, irregularly punctured; antennal foveæ well defined above; middle fovea wide, elongate, extending from near ocellar basin to near base of clypeus, open above and below; ocellar basin triangular, poorly defined below; postocellar area well defined laterally; postocellar furrow wanting; postocellar line slightly shorter than the ocellorbital line; antennæ short, thickened in the middle, the third joint nearly as long as fourth plus fifth; thorax normal; third cubital cell as long as one and two on the radius; hypopygidium broadly rounded apically. Black, rather densely clothed with gray hair; trochanters and base of hind tibiæ dirty white. Wings dusky hyaline; venation black.

*Type-locality*.—Wakasa, Japan. One male collected by Mr. T. Fukai.

*Type*.—Cat. No. 13322, U.S.N.M.

PARACHARACTUS LEUCOPODUS, new species.

Clypeus, labrum, and legs entirely straw-white; mesonotum marked with dark red.

*Male*.—Length 6 mm. Eyes distinctly converging to the clypeus; clypeus truncate; antennal foveæ small; middle fovea circular in outline, rather well defined; ocellar basin nearly wanting; postocellar area bounded laterally by punctiform fovea; postocellar furrow well defined, slightly bent, longer than the postocellar line; postocellar line slightly shorter than the ocellorbital line; antennæ filiform, the third joint but little longer than the fourth, apical joint slightly longer than the preceding; stigma rounded on the lower margin, third cubital cell about the same length as the second on the radius; hypopygidium broadly rounded at the apex. Black; clypeus,

labrum, and all of the legs straw-white, hind tarsi infuscated; pronotum, tegulae, lateral lobes of the mesonotum and margin of the anterior lobe rufous. Wings hyaline, iridescent; venation black, stigma dark brown.

*Type-locality*.—Japan. One male collected by Mr. Koebele.

*Type*.—Cat. No. 13323, U.S.N.M.

**MONOPHADNUS GENTICULATUS NIPPONICA, new subspecies.**

Differs from the typical form by the larger middle fovea, more sharply defined ocellar basin, sheath not so slender, and the legs below apices of femora whitish.

*Type-locality*.—Konosu, Saitama, Japan. One female collected April 14 by Mr. T. Fukai.

*Type*.—Cat. No. 13324, U.S.N.M.

**MONOPHADNUS FUKAII, new species.**

Related to *M. genticulatus* Hartig, but the antennae are shorter and stouter; the postocellar line is distinctly shorter than the ocellor-bital line, not subequal with it; the stigma is rounded on the lower margin; the wings are darker; and the sheath is broader.

*Female*.—Length 5 mm. Clypeus truncate, almost impunctate; antennal foveae poorly defined; middle fovea large transversely quadrate, well defined; ocellar basin better defined than in *genticulatus*, triangular; postocellar area well defined, the postocellar furrow angled in the middle; postocellar line one-third shorter than the ocellorbital line, but little longer than the ocelloccipital line; antennae short, robust, the third joint but little longer than the fourth, apical joint shorter than the preceding; stigma elongate, the lower margin rounded, the transverse radius leaving it free from the costa; third cubital cell shorter than the second, the transverse radius received near the apex; sheath rather robust, straight above, rounded below. Black; bases of tibiae brownish-white. Wings blackish; venation black.

*Male*.—Length 4 mm. Male is much like the female except that the legs below the apices of femora are brownish-white. Hypopygium narrowly rounded at the apex.

*Type-locality*.—Konosu, Saitama, Japan. Males and female collected April 14 by Mr. T. Fukai, for whom the species is named.

*Type*.—Cat. No. 13325, U.S.N.M.

**ANEUGMENUS JAPONICUS, new species.**

Related to *A. temporalis* (Thomson), but the venter, clypeus, and labrum are pale.

*Female*.—Length 5.5 mm. Clypeus nearly truncate; antennal foveae small; middle fovea large transversely subquadrate; ocellar

basin poorly defined, about twice as long as wide, reaching nearly to the middle fovea, angled above; postocellar area well defined laterally; postocellar furrow wanting; postocellar line distinctly longer than the ocellorbital line; third antennal joint nearly as long as four plus five; third cubital cell shorter than the second; stigma angled at base tapering to the apex; sheath straight above, obliquely truncate, broadening apically. Black; scape, clypeus, labrum, mandibles (apices dark piceous), pronotum, tegulæ, venter, and all of the legs pale yellow. Wings dusky hyaline; veins brown.

*Type-locality*.—Nikko, Japan. One female collected by Mr. A. Koebele.

*Type*.—Cat. No. 13326, U.S.N.M.

**STROMBOCEROS KOEBELEI, new species.**

Black; legs, venter, mouth, and part of thorax pale.

*Female*.—Length 7.5 mm. Clypeus deeply emarginate, lobes narrow and obtuse; antennal foveæ large, extending to the transverse facial carina above; antennal furrow complete above the transverse facial carina; middle fovea subcircular in outline; ocellar basin with very strong ridges, pentagonal, open below, the lateral walls extending to the bases of antennæ, middle fovea below level of basin, sharply angled at vertex; postocellar area with a longitudinal carina; postocellar furrow wanting; postocellar line about the length of the transverse facial carina, which is not complete; antennæ slender; posterior part of the anterior lobe depressed, with a strong median carina; stigma rounded on the lower margin, broadest a little basad of the middle; sheath straight above, rounded below. Black: scape, labrum, clypeus, mandibles (apices piceous), tegulæ, pronotum, sides of anterior lobe of mesonotum anteriorly, spot on posterior part of mesopleuræ; venter and all of legs pale yellow. Wings slightly dusky hyaline; venation dark brown, stigma pale brown, the lower part whitish.

*Type-locality*.—Nikko, Japan. One female collected by Mr. A. Koebele, for whom the species is named.

*Type*.—Cat. No. 13327, U.S.N.M.

**ATHALIA SPINARUM JAPANENSIS, new subspecies.**

Very like the European *spinarum*, but may be distinguished from that form by the black wings and black venation. The typical form of *spinarum* has the lateral lobes of the mesonotum entirely black, although there are occasionally specimens which have the anterior part the color of the sides. All the Japanese specimens have the anterior part of the lateral lobes of mesonotum the color of the sides. The Japanese forms are more pubescent and duller, the saw of the female is somewhat heavier in appearance; the hypopygidium of

the male is gently rounded at the sides, not somewhat angled, as in the European forms.

*Type-locality*.—Wakasa, Japan. Three females and two males collected by Mr. T. Fukai. A paratype female from Yokohama, Japan, collected "on flowers in hedges and gardens," June 20, 1906, by Mr. Brunetti.

*Type*.—Cat. No. 13328, U.S.N.M.

F. W. Konow<sup>a</sup> considers *spinarum* Fabricius to be a synonym of *colibri* Christ. Inasmuch as no proof is available and *spinarum* Fabricius is a well-known name, it is retained for the present.

#### ATHALIA JAPONICA (Klug).

A male collected in Japan by Mr. A. Koebele differs from Klug's description of the female in pale clypeus, labrum, mandibles, and scape. There is a small circular depression in front of the anterior ocellus; middle fovea deep, nearly circular; third antennal joint nearly as long as four and five combined; hypopygidium broad, gently round at the apex.

F. W. Konow<sup>b</sup> runs *japonica* in with the species which have the tibiae and tarsi black. In this he is wrong—the original description says: "Die Schienen und Fussglieder sind schwärzlich, erstere in der Mitte, letztere in ihrem Nasprunge gelblich."

#### ATHALIA LUGENS (Klug), INFUMATA (Marlatt).

*Phyllotoma infumata* MARLATT, Proc. U. S. Nat. Mus., vol. 21, 1898, p. 494.

F. W. Konow<sup>c</sup> places *Phyllotoma infumata* Marlatt as a synonym of *Athalia lugens* (Klug). A comparison of the types of *infumata* with specimens of this species from Europe shows racial differences. They may be separated by the following table:

Labrum and palpi dark reddish-brown; tibiae reddish-yellow except at the apex; wings brownish hyaline, venation brown; hypopygidium more sharply narrowed apically.....	<i>lugens lugens</i> (Klug).
Labrum and palpi black; tibiae black, at least the hind tibiae (these first two sets of characters hold for the females, but the males vary, the color of the wings in the males is, however, apparently constant); wings much darker, venation black; hypopygidium gradually narrowing apically and tapering its entire length.	<i>lugens infumata</i> (Marlatt.).

There are three females of the Japanese race from Yokohama, Japan, collected on flowers in hedges and gardens June 20 and July 25, 1906, by Mr. Brunetti in the collections of the National Museum. Mr. Fukai has sent the museum a female from Wakasa, Japan.

<sup>a</sup> Genera Insectorum, fas. 29, 1906, p. 93, and his table of 1908.

<sup>b</sup> Ann. Mus. Zool. St. Petersburg, vol. 13 (1), 1908, p. 12.

<sup>c</sup> Genera Insectorum, fas. 29, 1906, p. 94.

## Genus TAXONUS Hartig.

= *Ametastegia* A. COSTA, 1882.

Type.—(*Tenthredo coxalis* Klug) = *Tenthredo equiseti* Fallén.

F. W. Konow<sup>a</sup> says, in speaking of Hartig's genus *Taxonus*, "Deswegen muss der *T. agrorum* Typus seiner Gattung bleiben." O. Costa<sup>b</sup> in 1859 made *Ermilia pulchella* O. Costa as the type of *Ermilia* O. Costa. A. Costa<sup>c</sup> places *Ermilia pulchella* O. Costa as a synonym of *Tenthredo agrorum* Fallén, thus making the species *agrorum* Fallén the type of *Ermilia*. This removal of *Tenthredo agrorum* from the genus *Taxonus* in 1894 makes it impossible to select it as the type of the genus *Taxonus* in 1896; therefore some other type must be chosen for *Taxonus* than the one chosen by Konow. Dr. A. D. MacGillivray<sup>d</sup> fixes *Tenthredo equiseti* Fallén as the type of *Taxonus* which has *Tenthredo coxalis* Klug as a synonym, a species which was originally included.

The genus *Taxonus* may be divided into a number of subgenera, some of which are now recognized as good genera. The following may be separated thus:

Malar space present, although not very large; pedicellum longer than wide; postbasitarsis subequal in length with the following joints; tarsal claws cleft, or with an inner tooth..... 1.

1. Clypeus deeply emarginate; claws deeply cleft, the inner tooth shorter than the outer; pleuræ rather roughly sculptured; anal cell of hind wings petiolate; transverse median vein of fore wings in middle of cell; postnotum of metathorax as in *Taxonus*..... subg. *Ermilia* O. Costa.

Clypeus truncate or nearly; pleuræ not coarsely sculptured..... 2.

2. Postnotum of the metathorax without a well-defined, broadly triangular shaped production; anal cell of the hind wings sessile; transverse median vein of the fore wings received near the middle of the cell; hind wings of the male without a surrounding marginal vein; tarsal claws with an inner tooth; rather slender species..... subg. *Taxonus* Hartig.

Postnotum of the metathorax with a well-defined, broadly triangular-shaped lobe, as the scutellum of the mesothorax; anal cell of the hind wings petiolate; transverse median vein of the fore wings received distinctly basad of the middle of the cell; males unknown; tarsal claws cleft at the apex; larger and stouter species.

subg. *Nesotaxonus* Rohwer.

**NESOTAXONUS**, new subgenus.

Type of genus—*Phyllotoma? flavescens* Marlatt.<sup>e</sup>

Rather large robust species of the habitus of *Taxonus* (*Ermilia*); antennæ hairy, normally nine jointed, but in the type of the geno-

<sup>a</sup> Entomologische Nachrichten, vol. 22, 1896, p. 313.

<sup>b</sup> Fauna Napoli. Tenth., p. 106.

<sup>c</sup> Prospetto Imenotteri Italiani, vol. 3, 1894, p. 155.

<sup>d</sup> Can. Ent., October, 1908, p. 366.

<sup>e</sup> Proc. U. S. Nat. Mus., vol. 21, 1898, p. 494.

type they are ten jointed and the apical joint is not as long as in the paratype; lateral ocelli distinctly in front of the supraorbital line; posterior orbits narrower than in the subgenus *Ermilia*, or *Taxonus* and the occiput and posterior margin of the cheeks are not crenated; anterior tibiæ with only one well-defined apical spur, which is simple at the apex, the second spur being very short; third cubital cell longer than the two basal ones; first segment of the abdomen (basal plates) with a longitudinal suture, but this and the space between the first and second segments is chitinized, while in *Ermilia* they are membranous; sheath robust; cerci concealed.

With more material this may be raised to generic rank.

**ERIOCAMPA MITSUKURII, new species.**

Related to *E. umbiatica* (Klug), but may at once be distinguished by the strongly punctured head.

*Male*.—Length 6 mm. Clypeus coarsely punctured, the anterior margin arcuately emarginate; antennal foveæ well defined, shining; middle fovea large, well defined, transversely quadrate; ocellar basin well defined, the lower wall not so well defined, extending to the middle fovea, triangular in outline; postocellar area well defined laterally, with a distinct median longitudinal carina; postocellar furrow wanting; postocellar line not as long as the ocellocipital line; head, including the posterior orbits, strongly coarsely punctured; antennæ slender, the third joint but little shorter than the fourth and fifth; pronotum, mesopleuræ punctured like the head; mesonotum shining with a few widely scattered punctured, scutellum with the punctures closer; mesopleuræ shining; stigma nearly parallel-sided, the apex obliquely truncate; hypopygidium very broadly rounded at the apex. Black; four anterior legs below the femora brownish white. Wings hyaline, faintly dusky; venation brown.

*Type-locality*.—Nikko, Japan. One male collected by Mr. A. Koebele.

*Type*.—Cat. No. 13330, U.S.N.M.

Named for Doctor Mitsukuri, of the Imperial University, Tokyo, Japan, a Japanese entomologist.

**HEMITAXOMUS JAPONICUS, new species.**

Black; clypeus, labrum, angles of pronotum, tegulæ and legs, in part, pale.

*Male*.—Length 6 mm. Clypeus nearly truncate, granular; labrum rather narrowly rounded; antennæ foveæ sharply defined, extending from the clypeus to the transverse facial carina; middle fovea well defined, broader above; below this fovea is an indistinct angled furrow; ocellar basin sharply defined, hexagonal; postocellar furrow nar-

row, complete; sides of postocellar area punctiform; postocellar line distinctly shorter than the ocellorbital line; antennæ slender, the third and fourth joints subequal; thorax normal; stigma broadest near base, tapering to apex; hypopygidium long and narrow, apex nearly truncate angles rounded; genitalia stipes rounded at the apex. Black; clypeus, labrum, tegulæ, angles of pronotum, legs (the femora and tibiæ brownish) and genitalia stipes pale, the body markings yellow. Wings hyaline, iridescent; venation brown in part pale.

*Type-locality*.—Hakone, Japan. One male collected by Mr. A. Koebele.

*Type*.—Cat. No. 13329, U.S.N.M.

**DOLERUS INSULICOLA, new species.**

Very like *obscurus* Marlatt, but the clypeus is squarely emarginate, not with a U-shaped emargination, the saw is without well-defined transverse folds and the teeth are not as small or numerous.

*Female*.—Length 8 mm. Labrum impunctate; clypeus deeply squarely emarginate, lobes triangular, obtuse; head emarginate posteriorly; front closely granular, vertex with large punctures; antennal furrows complete; vertex carinated; third antennal joint longer than the fourth; dorsulum, scutellum and tegulæ with close distinct punctures; scutellar appendage large, pointed, with oblique striæ; mesopleuræ granular with a tendency of reticulation; basal plates impunctate; sheath large, obliquely truncate; saw slender, without transverse ridges, teeth sharp and pointing basally. Black; clypeal lobes, pronotum, tegulæ, trochanters, femora and most of tibiæ, dark rufous; head and thorax with short gray hairs; wings hyaline, iridescent; venation except the extreme base of stigma, black.

*Type-locality*.—Wakasa, Japan. Three females collected by Mr. T. Fukai.

*Type*.—Cat. No. 13331, U.S.N.M.

One of the paratypes has the clypeus entirely black, only part of the pronotum rufous and the sculpture of the dorsulum is not so dense.

**RHOGASTER NIPPONICA, new name.**

*Tenthredo picta* MOTSCHULSKY, Bull. Soc. Imp. Natur. de Moscow, 1866, p. 182. Not KLUG, 1814.

What has been determined as Motschulsky's species is different from both *R. varipes* (Kirby) and *R. viridis* (Linnæus). These three similarly colored species may be separated thus:

Labrum longer than wide.....	<i>varipes</i> (Kirby).
Labrum much wider than long.....	1.
1. Postocellar area carinated, quadrate.....	<i>nipponica</i> Rohwer.
Postocellar area not carinated, rectangular.....	<i>viridis</i> (Linnæus).

## MACROPHYA FUKAII, new species.

*Female*.—Length 8.5 mm. Labrum broader than long; clypeus deeply arcuately emarginate, lobes broad truncate; middle fovea indicated; antennæ furrows wanting; occiput carinate; postocellar area well defined on all sides, about twice as wide as the cephal-caudad length; postocellar line much shorter than the ocellorbital line; antennæ thickening apically, the third joint distinctly longer than fourth; head closely punctured all over; thorax punctured similar to the head but more finely so; stigma angled at base, gradually tapering; third cubital cell much longer than the second; sheath narrow, truncate at apex. Black; head and thorax slightly greenish; clypeus, labrum, mandibles (apices piceous), sides of the third abdominal segment, four anterior legs before, posterior coxæ and trochanters beneath and basal half of posterior tibiæ pale yellow; head and thorax with gray hair. Wings hyaline, slightly yellowish; venation dark brown.

*Type-locality*.—Wakasa, Japan. One female collected by Mr. T. Fukai, for whom the species is named.

*Type*.—Cat. No. 13332, U.S.N.M.

## LAGIUM JAPONICUM, new species.

Allied to *Lagium platyceros* (Marlatt), but is easily distinguished by the punctured vertex and posterior orbits, the poorly defined postocellar area, black third and fourth antennal joints, black mesonotum, and yellow scutellum.

*Female*.—Length 16 mm. Labrum rather narrow, a very little wider than long, apex rather acutely rounded; clypeus arcuately emarginate; entire head with close, rather large punctures; posterior orbits narrow for the genus; postocellar area poorly defined; eyes slightly converging to the clypeus, in this this species differs from the genotype; antennæ long, somewhat compressed, third joint much longer than the fourth; mesonotum with close, rather small irregular punctures; scutellum shining, sparsely sculptured; mesopleuræ and posterior coxæ sculptured like the mesonotum; transverse radius almost interstitial with the third transverse cubitus; transverse median in basal fourth of the cell; one closed discal cell in the hind wings; abdomen longer than the head and thorax, broad; sheath nearly straight above, the lower margin rounded. Head and thorax largely black; clypeus, labrum, mandibles (apices piceous), two basal and three apical antennal joints, palpi, large spot on upper posterior orbits, narrow inner orbits, angles of pronotum, tegulæ and scutellum *yellow* or yellowish; legs mostly yellow; coxæ at base, most of posterior femora, and apex of posterior tibiæ



black; posterior tibiæ at base, and the tarsi ferruginous; abdomen ferruginous, the sutures black. Wings yellowish hyaline, vitreous, apices slightly dusky; venation black, costa and stigma ferruginous.

*Type-locality*.—Japan. One female, No. 13, collector unknown.

*Type*.—Cat. No. 13335, U.S.N.M.

Differs in some points from the genotype of *Lagium*.

Genus JERMAKIA Jakowlew.

*Type of genus*.—*Allantus cephalotes* Jakowlew.

Species with much the same habitus as *Tenthredo* (olim *Allantus*). Eyes large and strongly converging to the clypeus; malar space very narrow about half the length of the pedicellum; maxillary palpi five jointed, labial palpi four jointed; mandibles large, robust; labrum rather large; clypeus large, emarginate, and without a suture separating it from the face; no dilations above the antennæ; third antennal joint distinctly longer than the fourth; pedicellum longer than wide; scutellum elevated; suture between the meso- and metanotum strong; a very deep suture between the metathorax and first segment of the abdomen; first segment of the abdomen entire, without the median longitudinal suture; tarsal claws cleft; venation as in *Tenthredo*.

This genus is distinct in the absence of the suture at the top of the clypeus, and the entire first segment of the abdomen.

The characters, given above, were taken from *Jermakia japonica* Rohwer, which seems undoubtedly to belong to this genus. F. W. Konow<sup>a</sup> places *Tenthredo flavida* Marlatt in this genus and gives the genus standing on this species. *Tenthredo flavida* Marlatt does not belong to the genus *Jermakia*.

JERMAKIA JAPONICA, new species.

*Male*.—Length about 13 mm. Clypeus squarely emarginate, with a slight rounded production in the middle, lobes short, truncate at apex; labrum and clypeus shining, impunctate; front and vertex with large well-separated punctures, posterior orbits with closer smaller ones; ocelli in a triangle greater than an equilateral triangle; post-ocellar area not sharply defined, the lateral furrows curved; ocell-occipital line and ocellorbital lines subequal, much longer than the postocellar line; occiput carinated; mesonotum with small, close punctures; scutellum pyramidal, with large punctures at the base but shining at the apex; mesopleuræ with irregular confluent punctures; mesosternum with a tubercle at lateral posterior angles; abdomen smooth, shining; hypopygidium rounded at the apex, broader than long;

<sup>a</sup> Genera Insectorum, fas. 29, 1906, p. 132.

genitalia stipes large, apex rounded. Black: a small spot at base of mandibles within, metaepisternum, a broad band on the first and fifth segments of the abdomen straw yellow; legs black, all the tibiae and tarsi beneath reddish yellow; genitalia brownish. Wings hyaline, basal half and cubital and radial areas of the anterior wings brown; venation black, stigma yellow.

*Type-locality*.—Hakone, Japan. One male from Mr. Matsumura, No. 47, July 27.

*Type*.—Cat. No. 13333, U.S.N.M.

The species of *Jermakia* may be separated by the following table:

Mostly luteous; "abdomine pallida-testaceo".....	<i>spinifera</i> Mocsary.
Mostly black.....	1.
1. Base of antennæ ferruginous; lateral margins of the first segment yellow.	<i>cephalates</i> Jakowlew.
Antennæ black; first dorsal segment all yellow.....	<i>japonica</i> Rohwer.

#### TENTHREDINA, new genus.

*Type of genus*.—*Tenthredo flavida* Marlatt.

In habitus much like *Dipteromorpha* W. F. Kirby, but that genus has a nearly truncate clypeus, the head narrowed behind the eyes, the dilated frons of *Tenthredella*, and the transverse median nearly interstitial with the basal vein.

Large species; labrum large; clypeus deeply emarginate, separated from the front by a suture; no large dilated frons above the antennæ as in *Tenthredella*; lateral ocelli below the supraorbital line; eyes large, strongly converging to the clypeus; malar space wanting; maxillary-palpi six jointed, labial-palpi five jointed; antennæ nine jointed, the third joint longer than the fourth, pedicellum much longer than broad; metathorax short; the first segment closely attached to the metathorax, with a longitudinal suture; abdomen rather narrowed basally; tarsal claws cleft; posterior coxæ rather large but not so long that the femora extend to the apex of the abdomen; legs hairy; wings large, third cubital cell longer than the first and second; transverse median received in the basal third of the cell; intercostal vein wanting; two discal cells in the hind wings, anal cell usually shorter than the submedian, and petiolate.<sup>a</sup>

In F. W. Konow's tables in the Genera Insectorum this genus runs to *Tenthredo* (now *Tenthredella*), but will be at once separated by the absence of antennal frons, cylindrical abdomen, and the first segment of the abdomen wider than the second. It may be that when the Tenthredininae of the Orient are better known that this will be restricted to a subgenus of *Tenthredella*, but at present it seems distinct.

<sup>a</sup> This character is subject to variation within a species. In one specimen of *Tenthredo flavida*, the hind wings on the right-hand side of the specimen, the anal cell is distinctly petiolate, while the left-hand wing has the anal cell nearly sessile.

## Genus TENTHREDO Linnæus.

= *Allantus* Jurine.

Latreille<sup>a</sup> fixed the type of *Tenthredo* Linnæus as *Tenthredo serophulariæ* Linnæus. This species was originally included and comes first in the group of Linnian species, which belong to Tenthredininae. *Tenthredo serophulariæ* Linnæus belongs to the genus *Allantus* Jurine and was named as the type of that genus by Curtis.<sup>b</sup> *Allantus* Jurine is therefore a synonym of *Tenthredo* Linnæus, the two genera being isogenotypic.

*Tenthredo* Linnæus 1758.*Allantus* Jurine 1807.

## TENTHREDELLA, new name.

= *Tenthredo* of authors.

*Tenthredo* having *Allantus* as a synonym leaves *Tenthredo* of authors without a name (*Rethra* Cameron not being a synonym of *Tenthredo* of authors). For *Tenthredo* of authors the name *Tenthredella* may be used. The type of *Tenthredella* is *Tenthredo atra* Linnæus.

## TENTHREDELLA HAKONENSIS, new species.

Perhaps related to *Tenthredella adusta* (Motschulsky), but has the thorax largely black, and different colored legs.

*Female*.—Length 17 mm. Labrum wider than long, apex broadly rounded; clypeus narrowly arcuately emarginate, lobes broad; head shining; orbital carina not extending across the postocellar area; postocellar area well-defined on all sides, wider than the cephal-caudad length, with distinct, separate punctures; ocelli in an equilateral triangle; antennæ wanting in the type; mesonotum and mesopleuræ punctured, the lateral lobes more finely so; scutellum more sparsely punctured, the scutellar lobe with large punctures; venation normal; prong on the inner spur of anterior tibiæ nearly at right angles and but little beyond the middle; sheath parallel-sided, the lower apex rounded. Head ferruginous; a black spot inclosing the ocelli and extending above and below it black; clypeus, labrum, mandibles (apices piceous), palpi, cheeks, supraclypeal area, narrow inner orbits, yellow. Thorax black; angles of pronotum, tegulæ, scutellum, scutellar lobe, metascutum, and notum yellow. Legs yellow; bases of coxæ and apical part of posterior femora black. Abdomen rufo-piceous, the apical segments very dark. Wings yellowish-hyaline, venation dark brown, stigma and costa yellow.

*Type-locality*.—Hakone, Japan. One female collected July 27, by Doctor Matsumura.

*Type*.—Cat. No. 13334, U.S.N.M.

<sup>a</sup> *Considerations Générales*, 1810, p. 435.

<sup>b</sup> *Brit. Ent.*, 1839, p. 764.

## A LIST OF THE JAPANESE TENTHREDINOIDEA.

## Family XYELIDÆ.

Genus *Xyela* Dalma.*japonica* Rohwer.*variegata* Rohwer.

## Family PAMPHILIDÆ.

Genus *Cephaleia* Panzer.Subgenus *Cephaleia* Panzer.*koebelei* Rohwer.*nigrocærulea* Rohwer.Genus *Neurotoma* Konow.Subgenus *Neurotoma* Konow.*iridescens* André.Genus *Pamphilius* Latreille.Subgenus *Pamphilius* Latreille.*smithii* Kirby.Subgenus *Anoplolyda* A. Costa.*archiducalis* (Konow).*lucidus* Rohwer.*sulphureipes* (Kirby).*venustus* (Smith).*volutilis* (Smith).

## Family CEPHIDÆ.

Genus *Hartigia* Schiodte and Boie.*viator* (Smith).Genus *Astatus* Jurine.*agilis* (Smith).

## Family SIRICIDÆ.

Genus *Sirex* Linnæus.*antennatus* Marlatt.*japonicus* Smith.*matsumuræ* Rohwer.Genus *Tremex* Jurine.*longicollis* Konow.*similis* Marlatt.

## Family XIPHYDIDÆ.

Genus *Xiphydria* Latreille.*buyssoni* Konow.*eborata* Konow.

## Family ARGIDÆ.

Genus *Arge* Schrank.*captiva* (Smith).*disparilis* (Kirby).*dubia* (Kirby).*enodis* (Linnæus).*jonasii* (Kirby).*japonica* (Marlatt).*mali* (Matsumura).*nigrinodosa* (Motschulsky).*pagana* (Panzer).*quadripunctata* (Kirby).*rejeeta* (Kirby).*similis* (Vollenhoven).*simillima* (Smith).*usutulata* (Linnæus).*nipponica* Rohwer.

## Family DIPRIONIDÆ.

[olim LOPHYRIDÆ.]

Genus *Diprion* Schrank.[olim *Lophyrus* Latreille.]*nipponica* Rohwer.*sertifera* (Fourcroy).Genus *Nesodiprion* Rohwer.*japonica* (Marlatt).

## Family CIMBICIDÆ.

Genus *Cimbex* Oliver.*carinulata* Konow.*japonica* Kirby.*nomuræ* Marlatt.*taukushi* Marlatt.*yorofui* Marlatt.Genus *Agenocimbex* Rohwer.*maculata* (Marlatt).*?jucunda* (Macsary).Genus *Trichiosoma* Leach.*tibialis* Stephens.Genus *Abia* Leach.*iridescens* Marlatt.*japonica* Cameron.*lewisii* Cameron.*pilosa* Konow.*relativa* Rohwer.

- Family TENTHREDINIDÆ.
- Genus *Cladius* Rossi.  
*pectinicornis* (Fourcroy).
- Genus *Pteronus* Jurine.  
*japonicus* Marlatt.
- Genus *Pachynematus* Konow.  
*alni* Rohwer.
- Genus *Pristiphora* Latreille.  
*insularis* Rohwer.
- Genus *Nesotomostethus* Rohwer.  
*religiosa* (Marlatt).
- Genus *Monophadnoides* Ashmead.  
*crassicornis* Rohwer.
- Genus *Paracharactus* MacGillivray.  
*leucopodus* Rohwer.  
*?nigriceps* (Smith).
- Genus *Monophadnus* Hartig.  
*fukaii* Rohwer.  
*genticulatus nipponica* Rohwer.  
*?lewisii* Kirby
- Genus *Aneugmenus* Hartig.  
*japonicus* Rohwer.
- Genus *Stromboceros* Konow.  
*koebelei* Rohwer.
- Genus *Athalia* Leach.  
*japonica* (Klug).  
*lugens infumata* (Marlatt).  
*spinarum japonensis* Rohwer.
- Genus *Taxonus* Hartig.  
Subgenus *Nesotaxonus* Rohwer.  
*flavescens* (Marlatt).
- Genus *Eriocampa* Hartig.  
*mitsukurii* Rohwer.
- Genus *Hemitaxonus* Ashmead.  
*japonicus* Rohwer.
- Genus *Strongylogasteroidea* Ashmead.  
*?iridipennis* (Smith).
- Genus *Emphytus* Klug.  
*japonicus* Kirby.  
*fuscipennis* (Smith).  
*nigrocæruleus* (Smith).
- Genus *Dolerus* Jurine.  
*bimaculatus* Cameron.  
*ephippiatus* Smith.  
*insulicola* Rohwer.  
*japonicus* Kirby.  
*lewisii* Cameron.  
*obscurus* Marlatt.  
*picinus* Marlatt.  
*subfasciatus* Smith.  
*umbraticus* Marlatt.
- Genus *Siobla* Cameron.  
*ferox* (Smith).  
*flavipes* (Smith).  
*pacifica* (Smith).
- Genus *Rhogogaster* Konow.  
*nipponica* Rohwer.  
*varipes* (Kirby).
- Genus *Pachyrotasis* Hartig.  
*erratica* Smith.  
*volatilis* (Smith).  
*pallediventris* Marlatt.
- Genus *Lagium* Konow.  
*japonicum* Rohwer.  
*platyceros* (Marlatt).
- Genus *Macrophya* Dahlbom.  
*apicalis* Smith.  
*carbonaria* Smith.  
*femorata* Marlatt.  
*fukaii* Rohwer.  
*ignava* Smith.  
*japonica* Marlatt.  
*luctifera*, Smith.  
*nigra* Marlatt.  
*nigropicta* Smith.  
*timida* Smith.  
*vexator* Smith.

Genus *Tenthredopsis* O. Costa.

*nigropectus* Kirby.

*irritans* (Smith).

Genus *Tenthredo* Linnæus.

[olim *Allantus* Jurine.]

*kohli* (Konow).

Genus *Jermakia* Jakowlew.

*japonica* Rohwer.

Genus *Tenthredina* Rohwer.

*flavida* (Marlatt).

Genus *Tenthredella* Rohwer.

[olim *Tenthredo* authors.]

*adusta* (Motschulsky).

*fentoni* (Kirby).

*fuscoterminalata* (Marlatt).

*gifui* (Marlatt).

*hakonensis* Rohwer.

*hilaris* (Smith).

*montivaga* (Marlatt).

*providens* (Smith).

*xanthopus* (Cameron).

*xanthatarsis* (Cameron).

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NOTE.

The appearance of a paper on the Palæartic species of *Macrophya*<sup>a</sup> necessitates some remarks on two Japanese species.

MACROPHYA FEMORATA, Marlatt.

Marlatt's statement concerning the length of the antennæ is wrong. In Enslin's table this runs to *quadrinaculata*, but may be distinguished from that species by the opaque head, raised frontal area, absence of the ocellar basin, and dark legs. In the type the legs are nearly black.

MACROPHYA JAPONICA, Marlatt.

This species runs in Enslin's table to *timida*, Smith, and differs from the description of that species in the yellow labrum.

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<sup>a</sup>Deutsche Ent. Zeit., vol. 5, Sept., 1910.